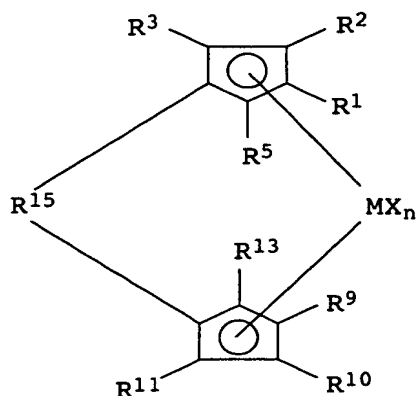


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We claim:

1. A process for producing injection stretch blow molded
 5 containers from olefin polymers by injection molding parisons
 at melt temperatures of from 200 to 280°C and then stretch
 blow molding the parisons at from 100 to 160°C, which
 comprises stretch blow molding olefin polymers comprising at
 least 40% by weight, based on the olefin polymers, of
 10 homopolymers of propylene or copolymers of propylene with
 other C₂-C₁₀ 1-alkenes, which are obtained by polymerizing the
 appropriate monomers with metallocene catalysts comprising,
 as active constituents,
 15 A) one or more metallocene complexes of the general formula
 (Ic)



(Ic)

where:

M is titanium, zirconium, hafnium, vanadium,
 niobium or tantalum, or else elements of the 3rd
 subgroup of the Periodic Table or of the
 35 lanthanoids,

X is fluorine, chlorine, bromine, iodine,
 hydrogen, C₁-C₁₀-alkyl, C₆-C₁₅-aryl, alkylaryl
 having from 1 to 10 carbon atoms in the alkyl
 40 radical and from 6 to 20 carbon atoms in the
 aryl radical, -OR⁶ or -NR⁶R⁷,

n is 1, 2 or 3, where n is the valence of M minus
 the number 2,

where

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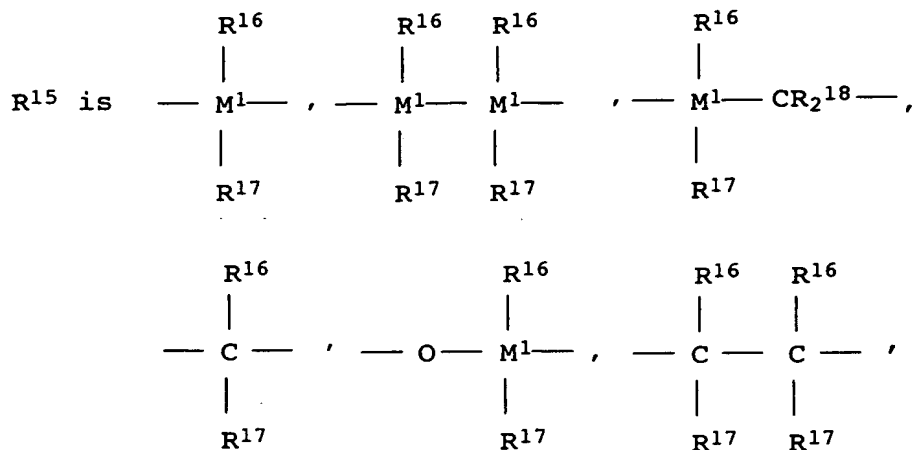
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R^6 and R^7 are C_1 - C_{10} -alkyl, C_6 - C_{15} -aryl, alkylaryl, aryl-alkyl, fluoroalkyl or fluoroaryl having in each case from 1 to 10 carbon atoms in the alkyl radical and from 6 to 20 carbon atoms in the aryl radical, and

the radicals X are identical or different,

R^1 to R^3 , R^5 , R^9 to R^{11} and R^{13} are hydrogen, C_1 - C_{10} -alkyl, 5- to 7-membered cycloalkyl, which in turn may be C_1 - C_{10} -alkyl-substituted, C_6 - C_{15} -aryl or arylalkyl, where two adjacent radicals together may also be saturated or unsaturated cyclic groups having from 4 to 15 carbon atoms, or $Si(R^8)_3$, where

R^8 may be C_1 - C_{10} -alkyl, C_3 - C_{10} -cycloalkyl or C_6 - C_{15} -aryl, and



$= BR^{16}$, $= AlR^{16}$, $-Ge-$, $-Sn-$, $-O-$, $-S-$, $= SO$, $= SO_2$,
 $= NR^{16}$, $= CO$, $= PR^{16}$ or $= P(O)R^{16}$,

where

each of R^{16} , R^{17} and R^{18} is identical or different and is hydrogen, halogen, C_1 - C_{10} -alkyl, C_1 - C_{10} -fluoroalkyl, C_6 - C_{10} -fluoroaryl, C_6 - C_{10} -aryl, C_1 - C_{10} -alkoxy, C_2 - C_{10} -alkenyl, C_7 - C_{40} -arylalkyl, C_8 - C_{40} -arylalkenyl or C_7 - C_{40} -alkylaryl, or where two adjacent radicals, in each case with the atoms linking them, form a saturated or unsaturated ring having from 4 to 15 carbon atoms, and

M¹ is silicon, germanium or tin,

and two adjacent radicals R² and R³ and two adjacent radicals R¹⁰ and R¹¹ are in each case together a ring having from 4 to 15 carbon atoms,

and

B) one or more metallocenium-ion-forming compounds.

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2. A process for producing injection stretch blow molded containers as claimed in claim 1, where the olefin polymers are homopolymers of propylene or copolymers of propylene with other C₂-C₁₀ 1-alkenes, obtainable by polymerizing the appropriate monomers with metallocene catalysts.

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3. A process for producing injection stretch blow molded containers as claimed in claim 1 ~~or 2~~, where the homopolymers of propylene or copolymers of propylene with other C₂-C₁₀ 1-alkenes, obtainable using metallocene catalysts, have a melting point of from -120 to 165°C.

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4. A process for producing injection stretch blow molded containers as claimed in claims 1 ~~to 3~~, where the homopolymers of propylene or copolymers of propylene with other C₂-C₁₀ 1-alkenes, obtainable using metallocene catalysts, have a melt flow rate MFR of from 2 to 50 g/10 min at 230°C with a load of 2.16 kg.

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5. A process for producing injection stretch blow molded containers as claimed in ~~any of claims 1 to 4~~, where the olefin polymers comprise up to 5% by weight, based on the olefin polymers, of nucleating agents as a further component.

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6. An injection stretch blow molded container as claimed in ~~any of claims 1 to 5~~, where the metallocene complex (Ic) is dimethylsilanedilybis[3,3'-(2-methylbenzindenyl)]zirconium dichloride.

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Injection stretch blow molded containers made from olefin polymers

5 Abstract

Injection stretch blow molded containers are obtainable from olefin polymers, comprising homopolymers of propylene or copolymers of propylene with other C₂-C₁₀-alk-1-enes, which are
10 obtainable by polymerizing the corresponding monomers with metallocene catalysts.

Processes for producing injection stretch blow molded containers from olefin polymers, and also the use of olefin polymers for
15 producing injection stretch blow molded containers, are described.

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